CHAPTER 8

COMBAT SERVICE SUPPORT

Tactical commanders can only realize the full combat potential of their units and achieve synchronization in their operations by effective use of their sustainment system. They must assure that their tactical plans realistically reflect logistics limitations and fully exploit their CSS capabilities.

FM 100-5, 1986

Combat service support operations are a vital part of infantry operations. The effectiveness of the CSS may determine the success or failure of the unit. Like CS, CSS is a combat multiplier. The CSS issue that has the greatest impact on the rifle company's tactical operations is the soldier's load.

During the Normandy Invasion, many casualties were attributed to the excessive loads carried by US soldiers as they tried to get ashore and across the beach. E Company, 16th Infantry suffered 105 casualties that day. Of these, 104 occurred on the beach, and most of them were due to their overloads. Many soldiers fell prone at the water's edge and were drowned by the incoming tide. The mens' packs were so heavy that they were able to walk only a few feet before falling to the sand. It took the company more than an hour to move 250 meters across the beach.

The paratroopers that jumped into Normandy carried the following:

1 carbine or M1 rifle
80 rounds of ammunition
2 hand grenades
1 mine
6 K-rations
1 impregnated jumpsuit
1 complete uniform
1 entrenching tool
1 field bag
1 escape kit
1 steel helmet with liner
1 knit cap
1 change of underwear
2 pairs of socks
1 gas mask
1 first-aid packet
1 spoon
2 gas protective covers
1 packet of sulfur
1 set toilet articles

Although they were required to jump heavy, once on the ground the individual soldier discarded all unnecessary items and traveled light. They understood from their training that their success depended on mobility, stealth, and surprise.

Even though these airborne units were without resupply for days, there is only one recorded incident where an airborne unit gave up ground due to ammunition shortages. This action involved 84 men from the 506th PIR at the LePort Bridge on the Douve River. This detachment conducted one of the most courageous stands of the invasion. (This bridge was later the site where V and VII Corps were linked up.) After three days of fighting to hold the bridge, the unit was forced to withdraw to the nearside of the river

until the ammunition bundles were found. Once found, the unit counterattacked to regain the lost ground.

There is no standard solution to the problem of overloading soldiers. The only doctrinal solutions available are the guidelines discussed later in this chapter and the realization that this is a command responsibility. Commanders must accept certain risks in every operation to prevent their soldiers from becoming pack animals who are unable to fight due to fatigue resulting from carrying overloaded rucksacks. The leaders must also enforce the load discipline required in every infantry unit.

Section I. FUNDAMENTALS

Sustaining his company in battle is one of the greatest challenges an infantry company commander faces. His CSS assets help him meet this challenge.

8-1. AIRLAND BATTLE IMPERATIVES

The AirLand Battle sustainment imperatives apply at company level. The application of these imperatives aids in increasing the combat power of the company. The sustainment imperatives are anticipation, integration, continuity, responsiveness, and improvisation.

a. **Anticipation.** All leaders in the company must anticipate the CSS requirements for their units. They must know the current status of their units and how fast each resource (water, food, ammunition, and so forth) is being expended. Due to the limited CSS structure supporting the company, the commander must plan ahead and submit requests as soon as the situation permits. This will allow the battalion to better configure packages of supplies to "push" to the company.

b. **Integration.** Every operation the company conducts must have a complete and fully integrated plan for CSS. Because of the relationship between the commanders tactical plan, the soldier's load, and the resupply requirements, the commander must consider them and casualty evacuation as he develops each course of action.

c. **Continuity.** The CSS for the company must be continuous. It is critical during the fight, but after the mission is accomplished, CSS activities become the focus for the company. The company SOP should cover resting and retraining soldiers, maintaining equipment, conducting resupply, holding religious services, handling mail, and conducting other administrative activities.

d. **Responsiveness**. The CSS structure for the company must quickly respond to changes in the situation or mission. To develop this ability, the company needs aggressive CSS operators and effective SOPs. Because the supply sergeant is the only company representative at the battalion trains, he must monitor the tactical situation and adjust the CSS plan as required.

e. **Improvisation.** Because of the austere CSS system and the way the company fights (continuous operations, dispersed formations, and long movements through difficult terrain), effective CSS depends on the initiative and creativity of those responsible to support infantry soldiers. The CSS system will often be pushed to its limit to support the plan.

8-2. BATTALION SUPPORT

The battalion S1 and S4 sections and the support, maintenance, medical, and communications platoons provide combat service support to the company. The detailed explanation of these sections and platoons is found in FM 7-20.

a. **Administration.** The company submits all requests and status reports involving personnel management, morale, discipline, and law and order to the battalion S1 section. The S1 section provides all administrative support to the company.

b. **Logistics**. The battalion S4 section and support platoon are responsible for providing the company with the supplies and equipment required for sustainment. The company submits all requests and statuses regarding supplies and equipment to the S4. The S4 and support platoon personnel plan, coordinate, and assist in the distribution of supplies and equipment to the company.

c. **Communications.** The company evacuates inoperative communications equipment to the communications platoon through the 1SG during resupply, where they perform maintenance or turn in the equipment to a higher level maintenance activity.

d. **Maintenance.** The supporting maintenance structure for infantry companies is austere in both organization and capabilities. The preferred method of direct exchange for weapons and equipment will not always be possible. Infantry companies must ensure their unit maintenance is effective and continuous to reduce the requirement for direct support maintenance.

e. **Medical.** The battalion medical platoon treats and evacuates the sick and wounded. It maintains the basic load of medical supplies for the battalion and provides an aidman to each rifle platoon. Ambulances are usually in direct support of the companies to provide evacuation. The treatment squad establishes and operates the battalion aid station. The medical platoon must be employed well–forward in many situations to assist the company casualty evacuation effort.

8-3. RESPONSIBILITIES AND ORGANIZATION

The company headquarters is responsible for the coordination and execution of CSS functions within the company. This includes reporting current statuses, requesting supplies or support, and then conducting effective CSS operations within the unit. The primary CSS functions required by the company include casualty evacuation, resupply operations, maintenance activities, and personnel service support.

a. **Planning.** Plans and key decisions on CSS are made by the battalion and company commanders and the battalion S4. They are implemented by the S4, support platoon leader, company first sergeant, company executive officer, company supply sergeant, platoon sergeants, and squad leaders. Platoon leaders plan and make CSS decisions to accomplish their assigned missions according to guidance from higher headquarters and SOPs. Unit SOPs should address planning, implementation, and responsibilities in detail as well as standardizing as many routine CSS operations as possible.

b. **Trains.** The company trains is the focal point for company sustainment operations. The size and composition of the company trains will vary depending upon the tactical situation. It may consist of nothing but preplanned locations on the ground (a control measure such as a checkpoint) during fast–paced offensive operations, or it may contain two to five tactical vehicles during resupply operations. The company trains

normally are established only when its functions of evacuation (WIA, weapons, equipment) and resupply are required. When the company has been allocated an ambulance, it will usually be in the company trains too. Company trains are located in a covered and concealed position, close enough to the company to provide responsive support, but out of enemy direct fire. Security is provided by the small size and tactical signature, by only establishing trains for a short time or when required, and by positioning the trains close to the combat platoons and sections.

c. **Personnel Responsibilities**. The following personnel have the primary responsibility for company CSS.

(1) *Company commander*. He ensures that CSS operations sustain his company's fighting potential. He integrates the CSS activities into the tactical plan, and he provides guidance to the CSS operators.

(2) *Company executive officer*. He coordinates and supervises the company's logistical effort. During the planning, he receives status reports from the platoon leaders/sergeants/1SG, reviews the tactical plan with the commander to determine company CSS requirements, and coordinates these needs with the battalion S4. During execution, the XO is at the second most important place in the battlefield as determined by the commander. At times, this will be supervising sustainment operations. Also, he ensures the CSS needs of supporting units are met.

(3) *First sergeant*. In addition to the tactical responsibilities listed in Chapter 2, the 1SG is the primary CSS operator for the company. He executes the company CSS plan and supervises the company trains. He makes sure the XO receives current status reports from all subordinate units, helps the XO prepare reports/requests to battalion, and helps the XO/CO prepare paragraph 4 of the OPORD.

(a) The 1SG receives, consolidates, and forwards all logistics, personnel, and casualty reports to the combat trains CP. He supervises the evacuation of casualties, EPWs, and damaged equipment, and he establishes and supervises company resupply activities.

(b) The 1SG also monitors the company maintenance activities. He orients new replacements and assigns them to squads and platoons IAW the commander's guidance. He maintains the battle roster for the company, and he submits other CSS reports as required by the unit's tactical SOPs.

(c) The 1SG gets his information from the platoon and or section sergeants. These NCOs are responsible for providing all CSS reports IAW the company SOP.

(4) *Supply sergeant*. He is the company representative in the battalion field trains. He assembles the LOGPAC and moves it forward to the company. He assists the 1SG with resupply and coordinates the company's CSS requirements with the support platoon leader, S4, and HHC commander. He is responsible for evacuating KIAs, EPWs, and damaged equipment, and he picks up replacement personnel and brings them forward to the unit. The supply sergeant may control the medical ambulance when it is unable to remain forward with the company. He monitors the tactical situation and adjusts the CSS plan as appropriate. He may assist the commander by establishing caches. He forecasts the company's consumption of food, water, ammunition, and batteries, based on the operation.

Section II. RESUPPLY OPERATIONS

Resupply operations normally occur once a day. When possible, they are conducted during limited visibility. There are many ways to conduct resupply operations; this section describes some of them. The commander considers his situation to decide on the best means of resupplying his company.

8-4. REQUIREMENTS

Company resupply is mainly a "push" system. This means the company will receive a standard package of supplies from battalion based on past usage factors and planning estimates. Figure 8-1 defines the classes of supply.

a. The contents of a LOGPAC are planned by the S4. The supplies are normally organized and assembled in the battalion field trains by the company supply sergeant under the supervision of the HHC commander and support platoon leader. The LOGPAC should, if possible, provide all supplies, equipment, and personnel needed to sustain the company for the next 24 hours or until the next scheduled LOGPAC delivery.

b. Adjustments to the LOGPAC are sent to the battalion S4, who is located in the combat trains CP. They may be sent to the S4 over the admin/log net, through the company supply sergeant, or by a company messenger. If the battalion admin/log net is used and is not secure, the reports should be encoded using the SOI.

c. Company status reports often translate into supply requests, or they provide information to allow the S4 to anticipate company needs. An example is the personnel daily summary, which is sent to the S1; it provides the number of personnel in the field, which the S4 can use to plan Class I resupply.

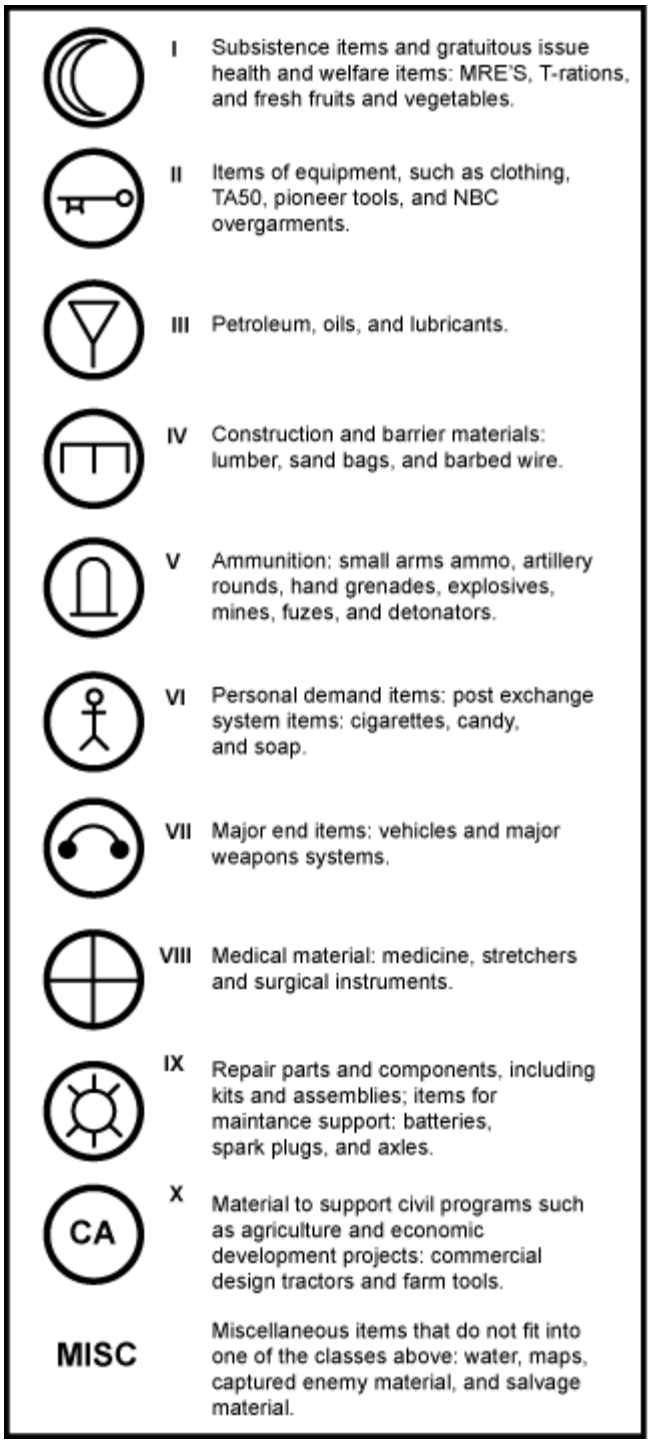


Figure 8-1. Supply classes.

8-5. DISTRIBUTION OF SUPPLIES FROM BATTALION TO COMPANY

The company receives supplies from battalion delivered as a LOGPAC or pre–positioned in appropriate locations. See FM 7-20 for more on this process.

a. **Logistics Package**. Once the company LOGPAC has been formed in the field trains, it is ready to move forward under the control of the company supply sergeant. The support platoon leader normally organizes a convoy for moving the LOGPACs along a supply route to the LRP where the 1SG or unit guide takes control. The LRP must be near enough to the company position to facilitate resupply since the company has no organic vehicles. The 1SG or guide controls distribution using the resupply techniques discussed in paragraph 8-6. The 1SG informs the supply sergeant of requirements for the next LOGPAC and ensures that personnel and equipment requiring movement to the rear, as well as out–going mail, return with the supply sergeant. The LOGPAC then follows unit SOP and returns to the LRP or the combat or field trains.

b. **Pre-positioned Supplies**. Pre–positioned resupply occurs when the battalion places supplies on the battlefield and directs the companies to them so they can pick them up when they are moving from one place to another.

8-6. COMPANY RESUPPLY TECHNIQUES

Company resupply techniques are those methods of employing company logistical assets (personnel and equipment) to effect resupply with subordinate elements. These techniques are independent from the methods in which the company receives supplies from higher headquarters; they are solely concerned with distribution of supplies to the platoons and sections. There are three company resupply techniques: in position, out of position, and pre–position.

a. **In Position**. The company executes in-position resupply by moving the required supplies or equipment forward while the platoons remain in their fighting positions. This technique is used when it is essential to maintain combat power forward (during contact or when contact is imminent) or when the company is dispersed over a wide area. If vehicles are not able to move near the platoons because of enemy fire, some platoon members may have to assist the resupply personnel in moving the supplies and equipment forward.

b. **Out of Position**. The company executes out–of–position resupply by directing the platoons to the supplies and equipment as follows:

- The company establishes a resupply point in a covered and concealed position to the rear of a platoon position.
- Platoons move from their fighting positions to the resupply point.
- Platoons pick up the supplies.
- Platoons move back to their fighting positions.

This technique is used when the situation does not necessitate all combat power being forward (contact is not likely). Company SOPs establish whether all or part of the platoon moves to resupply at one time. A variation of this technique would be to establish a resupply point for each platoon and reposition the LOGPAC.

c. **Pre–position**. The company or battalion pre-positions supplies and equipment along the route to or at the location to which the platoons are moving, and they direct the platoons to them. These supplies or equipment may be uploaded on a vehicle or on the ground, secured or unsecured, concealed or in the open. The factors of METT–T will determine exactly what measures are required. This technique is most often used during defensive operations when supplies are positioned in subsequent battle positions. A cache is a pre–positioned and concealed supply point. It can be used in any operation.

(1) Caches can be set up for a specific mission or as a contingency measure. They are an excellent tool for reducing the soldier's load. Cache sites have the same characteristics as an ORP or patrol base. The supplies may be concealed above or below ground. An above ground cache is easier to get to, but is more likely to be discovered by the enemy, civilians, or animals. There is always a security risk when returning to a cache. A cache site should be checked out for signs of enemy presence and secured before being used; it may have been booby trapped, or it may be under enemy observation.

(2) In the offense, a cache may be set up along the intended route of advance to the objective by advance elements. They may also be set up in zone to conduct continuous operations without requiring air or ground resupply that may allow the enemy to locate the company. Caches may be limited by the soldiers' loads. Do not let the cache activities jeopardize the offensive mission. In some cases, special forces, allied forces, or partisans may set up caches.

(3) In the defense, caches may be set up throughout the area of operation by the defending unit during the preparation phase. A cache should also be in each alternate or subsequent position throughout the depth of the defense sector. During stay–behind operations, or in an area defense on a fluid battlefield where the enemy is all around, caches may be the only source of supply for extended periods.

d. **Security.** While these techniques are used in both offensive and defensive operations, the transfer of supplies to the company is usually conducted from a defensive posture. As such, the security considerations for a resupply operation are like those for a perimeter defense.

8-7. CONSIDERATIONS

The techniques described in paragraph 8-6 provide the normal methods for resupply within the company. However, a basic understanding of nonstandard techniques, different modes of delivery, and specific supply issues is also required for the successful execution of the sustainment function.

a. **Foraging and Scavenging.** Two resupply techniques not discussed earlier because of their infrequent use are foraging and scavenging. Infantry forces should not use these techniques except under other than normal conditions. Foraging is the gathering of supplies and equipment necessary to sustain basic needs (food, water, shelter, and so forth) from within the area of operations. Scavenging is the gathering of supplies or equipment (friendly or enemy) from within the area of operations to help the user accomplish his military mission. Leaders must ensure the safety of their soldiers by determining if the food or water is safe or the equipment is booby trapped. They must also make sure their actions are permissible under the Law of Land Warfare, FM 27-10.

b. **Aerial Resupply.** This method of delivery may be used to provide supplies and equipment to the company. Unless conducting the resupply in an area under friendly control and away from direct enemy observation (reverse slope of a defensive position with recon well forward), the resupply should be conducted away from the main unit in an area that can be defended for a short time. The delivered supplies should be quickly transported away from the DZ/LZ. The company supply sergeant is responsible for packaging airloads originating in the field trains. The commander must consider the enemy's ability to locate his unit by observing the aircraft.

c. **Cross–Leveling**. Cross–leveling is simply a redistribution of supplies throughout the unit. Usually done automatically between fire teams and squads after every engagement, the company may cross–level supplies between platoons when resupply cannot be effected. In some instances, supplies may not be evenly redistributed. For example, during preparation for an assault of an enemy trench system, the platoon with the task of support by fire may be required to give its hand grenades to the platoon with the task of clearing the trench.

d. **Backhauling**. Backhauling is a method used to make the most use of vehicular or manpack capabilities moving rearward. Backhauling returns supplies, equipment, or trash to the rear for disposition.

e. **Water**. Ensuring that soldiers receive and drink enough water is one of the prime CSS and leadership functions at all levels in the company chain of command. Even in cold areas, everyone needs to drink at least two quarts of water a day to maintain efficiency. Soldiers will drink water at an increased rate in a combat environment.

(1) Water is delivered to the unit under company or battalion control in 5–gallon cans, backpacks, or collapsible containers. When a centralized feeding area is established, a water point is set up in the mess area, and each soldier fills his canteen as he goes through. When rations are distributed by the company, water can be resupplied either by collecting and filling empty canteens or by distributing water cans to the platoons.

(2) Water is habitually included in LOGPACs. The ability of the command to supply water is limited by the ability of the division support command's water section to purify it and store it, plus the ability of the logistics system to transport it. The logistics system may not always be able to meet unit needs, particularly during decentralized operations. There are a variety of ways, however, that the unit can ensure that it is supplied.

(3) When water is not scarce, leaders must urge soldiers to drink water even when not thirsty. This is because the body's thirst mechanism does not keep pace with the loss of water through normal daily activity. The rate at which dehydration occurs will depend on the weather conditions and the level of physical exertion.

(4) If water is in short supply, be sparing in its use for hygiene purposes. Water used for coffee or tea may also be counterproductive since both increase the flow of urine. When in short supply, water should not be used to heat MREs. However, soups are an efficient means of getting both water and nutrition when water is scarce. This is especially true in cold weather when heated food is desirable. A centralized heating point can be used to conserve water yet provide warmed MREs.

(5) In most environments, water is available from natural sources. Soldiers should be trained to find, treat (chemically or using field expedients), and use natural water sources. See FM 21-76 for more information.

8-8. TRANSPORTATION

Movement of supplies, equipment, and personnel with the limited vehicle assets available requires careful planning and execution. Light infantry, airborne, air assault, and ranger companies have no organic transportation. Vehicle assets are provided to these companies from battalion or higher levels. Normally one vehicle is dedicated to the company.

a. When vehicles are provided to the company, they must be employed to capitalize on their capability to execute the mission requirement, and they must be returned for

follow–on company or parent-unit missions. Transportation assets are scarce, often resulting in trade–offs. For example, upload increased quantities of ammunition and less water, or carry unit rucksacks and be unavailable for resupply. The company commander must ensure that the asset is being employed to accomplish the most important mission. Time is critical and the company must reduce on–station time so that all company requirements can be met. Most vehicles do not have radios; leaders must ensure that drivers know where they are going and how to get there. Land navigation training, marked routes, and strip maps referenced to landmarks are all ways to keep drivers from getting lost.

b. Because of the limited ground transportation, company personnel must know how to conduct aerial resupply. (See FM 90-4.) An understanding of PZs/LZs selection, sling loading, bundle drops, and allowable cargo loads may be critical to company sustainment.

8-9. MAINTENANCE

The maintenance of weapons and equipment is continuous. Every soldier must know how to maintain his weapon and equipment in accordance with the related technical manual. The CO, XO, and 1SG must understand maintenance for every piece of equipment in the company.

a. The unit SOP should detail when maintenance is performed (at least once a day in the field), to what standards, and who inspects it (usually the squad leader with spot checks by the platoon sergeant, platoon leader, 1SG, XO, and CO). One technique is for each to spot check a different unit; another is for each to check a single type of weapon or piece of equipment in all units daily. These instructions must be integrated into the SOP for patrol bases, assembly areas, defenses, and reorganization. This is to ensure that maintenance is done without jeopardizing unit security, and also so it will become a habit for the soldiers.

b. In addition to operator maintenance, selected soldiers are trained to perform limited maintenance on damaged weapons and to direct exchange parts from destroyed weapons.

c. Inoperative equipment is fixed as far forward as possible. When a piece of equipment is damaged, it should be inspected to see if it can be repaired on the spot. The company armorer keeps a small–arms repair kit in the battalion trains or on the dedicated company vehicle. The battalion communications section has a limited capability to repair radios. If it cannot be fixed forward, it is evacuated immediately (in an assembly area or defense area), or turned in using the backhaul method when other supplies are brought forward. Even if the item cannot be evacuated at once, the CSS system is alerted to generate a request for a replacement. If a replacement is available (from an evacuated soldier or scavenged equipment), it will be sent forward. If not, the leader must work around it by prioritizing the use of remaining equipment; for example, using a squad radio for the company command net if the platoon radio is broken.

d. Maintenance applies to all equipment. Items such as magazines, ammunition, and batteries are also maintained and inspected. While test firing in an assembly area, mark the magazines of weapons that have stoppages. If a magazine is marked more than twice, the magazine may be causing stoppages. Inspect the ammunition belts for M60s and

M249s along with the weapons. Dirty or corroded ammunition may also cause weapon malfunctions.

Section III. SOLDIER'S LOAD

The soldier's load is a crucial concern of the leader. How much is carried, how far, and in what configuration are important mission considerations. Army research indicates that a soldier can carry an amount equal to 30 percent of his body weight and still retain a high percentage of his agility, stamina, alertness, and mobility. Success and or survival in the operations a rifle company will conduct demand that soldiers retain these capabilities. When unable to move with stealth, agility, and alertness, the unit is at risk. For the average soldier (weighing 160 pounds), this would be a 48-pound load. For each pound over 30 percent, the soldier loses a proportional amount of his functional ability. When his load exceeds 45 percent of his body weight, or 72 pounds, his functional ability drops rapidly and the chance of him becoming a casualty increases. Research also indicates that training can improve load–carrying capability by 10 to 20 percent at best. The solution is command emphasis. COs must ensure soldiers carry no more than 48 pounds when in contact with the enemy or when enemy contact is expected. At other times, the soldier's load should not exceed 72 pounds. Sometimes soldiers may have to carry more than the recommended combat weight. Leaders must realize how that excess weight impacts on the unit's effectiveness. Appendix A in FM 21-18 has additional information on the soldier's load.

8-10. LOAD PLANNING

The purpose of load planning is two–fold. First, it allows the commander to use the estimate of the situation to determine what ammunition, supplies, and equipment are essential. Second, it recognizes the potential impact of the soldier–load problem and emphasizes the need to carry only what is necessary. The commander then arranges for the remainder of the load to be secured or transported. To do this, the soldier and unit equipment must be echeloned. For this purpose, the commander breaks the company's equipment and supplies into three echelons–combat (approach march and fighting loads), sustainment, and contingency loads (Figure 8-2).

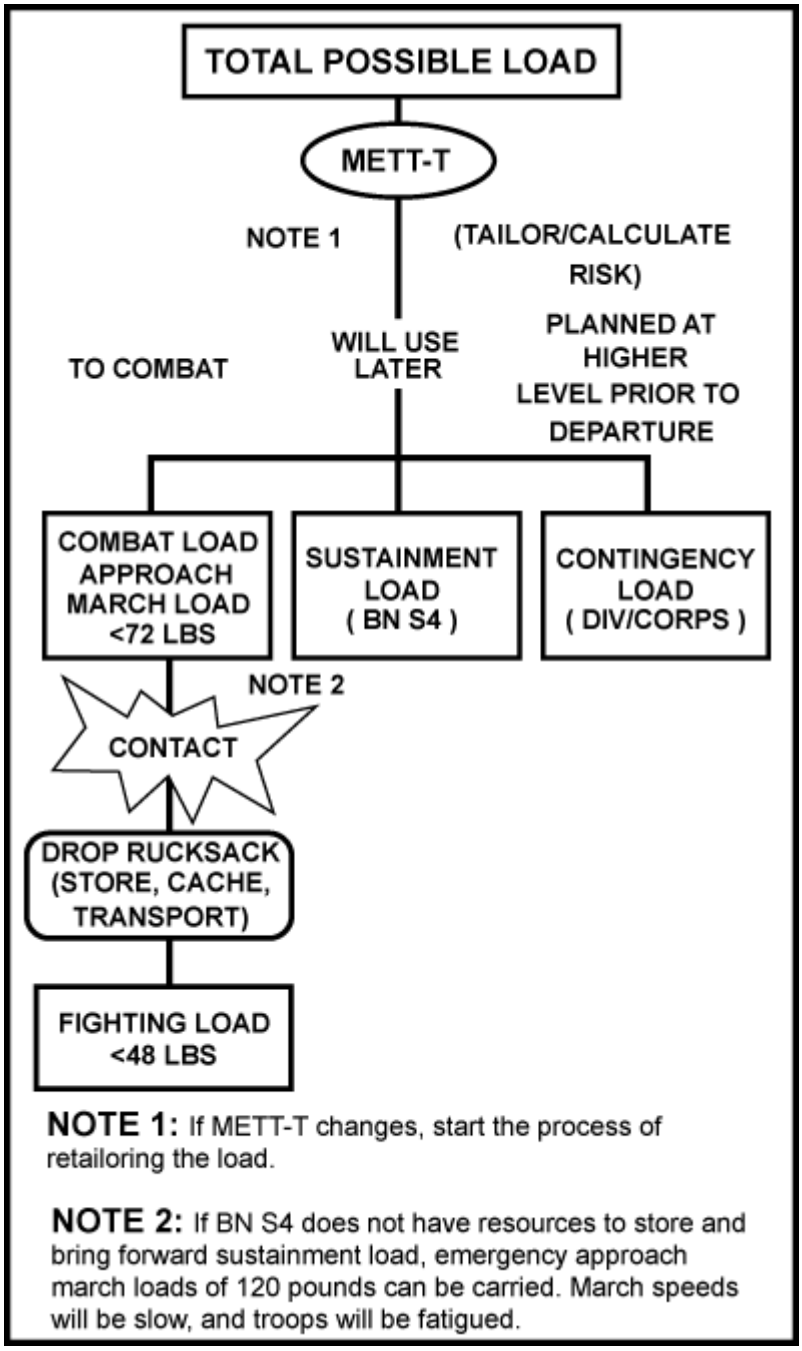


Figure 8-2. Load echelon diagram.

a. **Combat Load.** A combat load consists of the minimum mission–essential equipment, as determined by the mission commander. This includes only what is needed to fight and survive immediate combat operations. There are two levels of combat load: fighting loads, carried on dynamic operations where contact with the enemy is expected; and approach march loads, carried when transportation cannot be provided for equipment over and above fighting loads.

(1) *Fighting load*. This is what the soldier carries once contact has been made with the enemy. It consists of only essential items the soldier needs to accomplish his task

during the engagement. For close combat and operations requiring stealth, any load at all will be a disadvantage. Cross–loading of machine gun ammunition, mortar rounds, antitank weapons, and radio equipment will cause most combat loads to be over 48 pounds. This is where risk analysis is critical. Excessive combat loads of assaulting troops must be configured so that the excess can be redistributed or shed (leaving only the fighting load) before or upon contact with the enemy.

(2) *Approach march load*. This is the load that the soldier carries in addition to his fighting load. These items are dropped in an assault position, ORP, or other rally point before or upon contact with the enemy. On long dynamic operations, soldiers must carry enough equipment and munitions to fight and exist until a planned resupply can take place. These loads will vary and may exceed the goal of 72 pounds. Heavier approach march loads can be carried successfully in an emergency. When the mission demands that soldiers be used as porters, 100–pound loads can be carried 20 kilometers a day for several days. Loads up to 150 pounds are possible, but they present an increased risk of fatigue and injury. However, when such loads are carried–contact with the enemy must be avoided, march rate must be very slow, and soldiers must be rested before combat.

b. **Sustainment Load**. This load consists of the equip-ment required by the commander for sustained operations. This equipment should be stored by battalion, normally at the BSA, and brought forward when needed. It may include rucksacks, squad duffel bags, and spare equipment, such as PEWS and sleeping bags. In combat, protective items for specific threats, such as armored vests and chemical suits, may be stored in pre–configured unit loads. Equipment, such as Dragon night sights, grappling hooks and ropes, and pioneer tools, also needs to be stockpiled at a location from which the battalion support platoon can push them forward on demand. Commanders must coordinate with the S4 to ensure that those items are available.

c. **Contingency Load**. The contingency load includes all other items that are not necessary for ongoing operations, such as extra clothing, personal items, or even Dragons and TOWs in a nonarmor threat environment. The critical element is for commanders to determine what goes in those loads and who will be responsible for the storage and delivery of them.

8-11. LOAD CALCULATION

The combat load for each soldier consists of three components: common essential items carried (worn) by all soldiers regardless of threat, environment, or mission; duty position load, consisting of the soldier's assigned weapon (or components of the weapon system) plus ammunition; and variables, consisting of all other items carried, based on the commander's estimate of the situation. The latter are items that constitute the environmental, threat protection, and mission loads.

a. Adjust combat loads so soldiers carry less than 72 pounds and divide combat loads into fighting loads and approach march loads; have soldiers pack rucksacks and assault packs accordingly. All other company equipment goes into the sustainment or contingency load.

Example: Rifleman's combat load.

1. Common Items		**Pounds**
Battle dress uniform (BDU), boots		8.20
Pistol belt, straps, and first–aid kit		1.60
Canteen, cup and cover; with water		3.30
Poncho		1.70
Gloves		0.30
Socks		0.30
Meals ready to eat (MRE) (1)		1.00
Bayonet with scabbard		1.30
	Total:	17.70
2. Duty Load		
M16A1 (A2) with 30–round magazine		8.20
Two ammunition pouches		1.80
Six magazines/180 rounds		6.30
Two grenades		2.00
	Total:	18.30
3. Variables		
Environment		
Field jacket		3.00
Pile cap		0.26
2-quart canteen, cover, water		4.80
Poncho liner		1.60
	Total:	9.66
Threat		
Protective mask.		3.00
Helmet.		3.40
	Total:	6.40
Mission		
ALICE pack with frame		6.30
Round, 60-mm mortar (1)		3.50
Grenade, smoke, HC (1)		2.56
LAW (1)		4.70
Compass		0.25
	Total:	17.31

4. Total Combat Load	**Pounds**
Common items	17.70
Duty load	18.30
Variables	
Environment	9.66
Threat	6.40
Mission	17.31
Total:	69.37

b. Once it has been decided what items are to be carried on the mission, the leader decides how they will be carried. Some items must always be immediately available to the soldier, while others can be carried in his rucksack.

8-12. LOAD MANAGEMENT TECHNIQUES

The key is to carry only what is necessary to accomplish the mission. The following techniques will assist the commander in load management.

a. Make sure soldiers distribute their loads evenly over the body and LBE; they are easier to carry this way.

b. Carry critical items within easy reach; water, ammunition, and a first–aid pouch are carried on the LBE, other items in BDU pockets. Placement of all items should be standardized within the unit, but nothing must be allowed on the firing side of the LBE that prevents the soldier from taking a well–aimed shot.

c. Distribute loads throughout the unit. If it is necessary to manpack bulk ammunition, rations, water, or demolitions, divide them into small loads consistent with METT–T; however, ensure they can be distributed on the battlefield where needed.

d. Rotate heavy loads among several soldiers. Radios, M60s, mortars, and Dragons can all be rotated if enemy contact is not imminent. Ensure that the assigned gunner is nearby when weapon system components are rotated.

e. Always consider use of augmented transportation assets in-theater to carry loads. Host nation or allied force's vehicles, animals, civilians, and even bicycles can be used to carry soldiers and equipment; however, do not procure them without authority.

f. Drop rucksacks on enemy contact, or leave them in an ORP, an assault position, or the assembly area. The leader requests they be brought to his unit by battalion or division transportation assets when possible. Soldiers mark their rucksacks by unit to facilitate quick recovery.

g. Share or consolidate items; if the weather dictates sleeping bags be carried, carry only enough for those who will sleep at the same time. Soldiers share the bags as they take turns rotating security duty. In the same manner, two or three soldiers can share a rucksack and take turns carrying it.

h. Consider cutting rations to two or even one MRE per man per day for short periods. Use foraged or locally purchased food to extend the shortened rations.

i. While carrying the rucksack, use water and rations carried in or on it first. If soldiers must drop their rucksacks, what they carry in their BDUs and on the LBE remains available. Replace ammunition, water, and rations carried on LBE or in BDU pockets as soon as possible.

j. When carrying radios in rucksacks, keep them attached to the backpack for access and use when rucksacks are dropped.

k. Consider caches, supply linkups, captured stocks, and foraging to provide food, water, shelter, weapons, and equipment to reduce the need to manpack supplies.

l. Avoid unnecessary movement and displacements. To conserve the soldier's stamina, plan the mission as efficiently as possible. Do not move a platoon when moving a squad can do the job. The leader, if lost, stops and determines his unit's location before moving and, if necessary, sends out someone to confirm the unit's location.

m. Supervise the soldier's load closely. Soldiers may carry unnecessary items when they start on a mission and throw essential items away when they are tired. Packing lists for rucksack management and leader inspections before and during the mission ensure that only necessary items are carried. Rucksack management results in efficient use of a soldier's energy and ensures that essential items are available when needed in combat.

n. The company net does not always need the COMSEC equipment to function effectively. Ensure the threat warrants the extra weight on the RATELOs.

o. Consider distributing the approach march or sustainment loads to only two platoons. This allows the lead platoon to move with more stealth and alertness, and also unburdened in case of contact. Platoons could then quickly swap rucksacks as they assume the lead.

Section IV. PERSONNEL SERVICE SUPPORT

Expeditious handling of company paperwork is necessary for both efficiency and morale. The battalion PAC provides most of the company's administrative support. Information is passed from the company to the PAC through the S1 or the PAC supervisor. Though the system is informal, the information must be accurate and timely. Company administration consists of personnel services and replacement operations.

8-13. PERSONNEL SERVICES

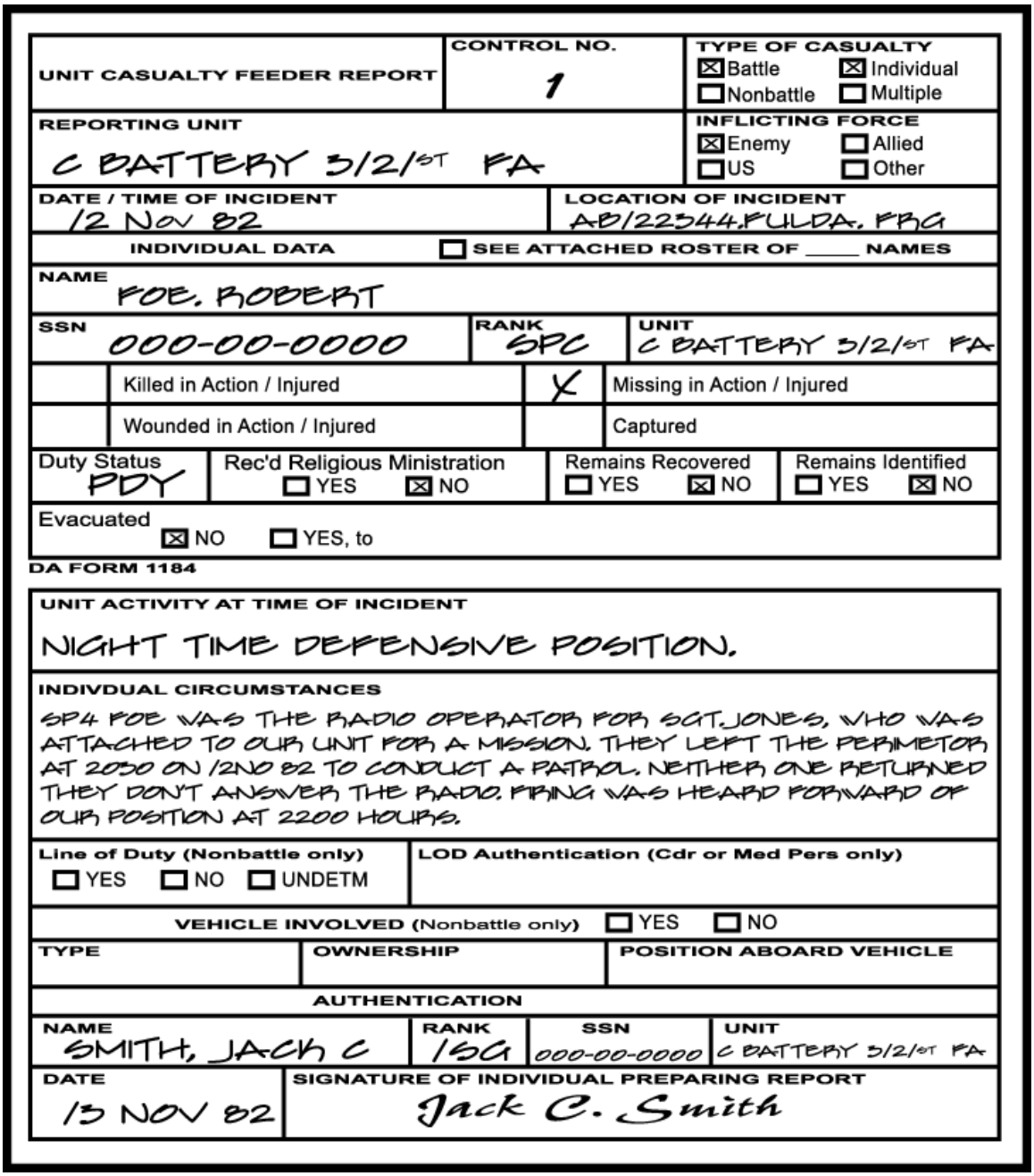
These services include strength accounting; casualty reporting; replacement procedures; personnel records maintenance; personnel actions, such as awards, promotions and reductions, and classifications and reclassifications; and religious support.

a. The company is responsible only for casualty reporting or requesting personnel actions.

b. Based on local SOP, a strength accounting report is sent to battalion combat trains over the admin–log net detailing strength by officer, enlisted, and attached personnel. Data for this report must be gathered as quickly and accurately as possible because this critical information assumes increasing importance in decision–making as it is passed to the rear. Strength reports help determine the quantity of rations, water, and ammunition to send to each company. These reports are also used to analyze the company's strength, posture, and status. At higher echelons, they are used to determine which units receive priority when replacements arrive.

c. A casualty report, DA Form 1156 (Figure 8-3), is filled out when a casualty occurs or as soon as the tactical situation permits. This is usually done by the soldier's squad leader and turned in to the platoon sergeant, who passes it along to the first sergeant. A brief description of how the casualty occurred, to include the place, time, and activity being performed, and who or what inflicted the wound is included. If the squad leader does not have personal knowledge of how the casualty occurred, he gets this information from any soldier who does. Pocket-size witness statements, DA Forms 1155

(Figure 8-4), are used to report missing or captured soldiers or when remains are not recovered. The form is completed by the soldier with the most knowledge of the incident. This information is used to inform the soldier's next of kin and to provide a statistical base for analysis of friendly or enemy tactics. The commander writes a letter to the soldier's next of kin.



UNIT CASUALTY FEEDER REPORT | CONTROL NO. 1 | TYPE OF CASUALTY: ☒ Battle ☒ Individual ☐ Nonbattle ☐ Multiple

REPORTING UNIT: C BATTERY 3/2/6T FA | INFLICTING FORCE: ☒ Enemy ☐ Allied ☐ US ☐ Other

DATE / TIME OF INCIDENT: 12 NOV 82 | LOCATION OF INCIDENT: AB122544.FULDA, FRG

INDIVIDUAL DATA ☐ SEE ATTACHED ROSTER OF ____ NAMES

NAME: POE, ROBERT

SSN: 000-00-0000 | RANK: SPC | UNIT: C BATTERY 3/2/6T FA

	Killed in Action / Injured	X	Missing in Action / Injured
	Wounded in Action / Injured		Captured

Duty Status	Rec'd Religious Ministration	Remains Recovered	Remains Identified
PDY	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

Evacuated ☒ NO ☐ YES, to

DA FORM 1184

UNIT ACTIVITY AT TIME OF INCIDENT

NIGHT TIME DEFENSIVE POSITION.

INDIVDUAL CIRCUMSTANCES

SP4 POE WAS THE RADIO OPERATOR FOR SGT. JONES, WHO WAS ATTACHED TO OUR UNIT FOR A MISSION. THEY LEFT THE PERIMETER AT 2050 ON 12NO 82 TO CONDUCT A PATROL. NEITHER ONE RETURNED THEY DONT ANSWER THE RADIO. FIRING WAS HEARD FORWARD OF OUR POSITION AT 2200 HOURS.

Line of Duty (Nonbattle only) ☐ YES ☐ NO ☐ UNDETM | LOD Authentication (Cdr or Med Pers only)

VEHICLE INVOLVED (Nonbattle only) ☐ YES ☐ NO

TYPE	OWNERSHIP	POSITION ABOARD VEHICLE

AUTHENTICATION

NAME	RANK	SSN	UNIT
SMITH, JACK C	1SG	000-00-0000	C BATTERY 3/2/6T FA

DATE: 13 NOV 82 | SIGNATURE OF INDIVIDUAL PREPARING REPORT: Jack C. Smith

Figure 8-3. Casualty report.

WITNESS STATEMENT ON CASUALTY INCIDENT (AR 800-10)	CHECK APPLICABLE BOX: ☐ Killed in Action/Dead (remains not recovered) ☐ Wounded in Action/Injured ☒ Missing in Action/Missing ☐ Captured		
1. LAST NAME, FIRST NAME MI (of casualty): FOE, ROBERT	2. SSN:	3. RANK: SPC	4. SEX: M
5. ORGANIZATION: C BATTERY 3/2/5T FA	6. DATE OF DEATH OR WHEN LAST SEEN: 2030, 12 NOV 82		
7. GEOGRAPHICAL LOCATION OF INCIDENT (Include grid acordinates and nearby town): AB 122 344 FULDA, FRG	9. OTHER PERSONS WHO MAY HAVE WITNESSED THIS INCIDENT OR HAVE FURTHER INFORMATION: ISG SMITH C BATTERY FA		
9. CIRCUMSTANCES SURROUNDING INCIDENT (If known, include cause of death or condition when last seen, or how identified): SP4 FOE WAS THE RADIO OPERATOR FOR 2LT JONES WHO WAS ATTACHED TO OUR PLATOON FOR A MISSION.			

DA FORM 1156 — REPLACES EDITION OF 1 JUN 66, WHICH WILL BE ISSUED AND USED UNTIL EXHAUSTED.

9. CIRCUMSTANCES SURROUNDING INCIDENT (Continued)		
HE WENT ON PATROL WITH SGT JONES ON 12 NOV 82. HE LEFT OUR LINES AT 2030. NEITHER ONE RETURNED. THEY DON'T ANSWER THE RADIO. FRNG WAS HEARD FORWARD OF OUR POSITION ABOUT 2200 HOURS.		
10. NAME OF PERSON MAKING STATEMENT: Q.T. WILLIAMS	11. RANK: PSG	12. SSN: 000-00-000
13. UNIT: C BATTERY 3/2/5T FA	14. DATE: 13NOV82	15. SIGNATURE: Q.T. Williams

Figure 8-4. Witness statement.

8-14. REPLACEMENT OPERATIONS

Integrating replacements into a company is important. A new arrival on the battlefield may be scared and disoriented as well as unfamiliar with local SOPs and the theater of operations.

a. The company commander should meet them and welcome them to the unit. This will normally be a brief interview. The commander must have an SOP for reception and integration of newly assigned soldiers.

b. The platoon leader and platoon sergeant will welcome them to the unit, inform them of unit standards, and introduce them to their squad leaders.

c. The squad leader introduces them to the squad and briefs them on their duty positions. He also ensures that each replacement has a serviceable, zeroed weapon; ammunition; MOPP gear; and other essential equipment. The in–briefing should cover squad and platoon recent, current, and planned activities.

d. The new arrival is told about important SOPs and special information concerning the area of operations. He may be given a form letter to send to his next of kin. The letter should tell them where to mail letters and packages, tell them how to use the Red Cross in emergencies, and introduce them to the chain of command.

Section V. MEDICAL SUPPORT

At company level, health services support addresses three areas: preventive medicine, medical treatment, and evacuation of casualties. Each rifle company has at least three aidmen from the battalion medical platoon's combat medic section attached to perform routine and emergency combat medical services.

8-15. PREVENTIVE MEDICINE

Emphasis is placed on prevention since soldiers may become combat ineffective from disease or nonbattle injury as well as from combat wounds. By understanding and applying the principles of field hygiene, preventing weather-related injuries, and paying attention to the soldiers' overall condition, some casualties may be prevented. (See FMs 21-10 and 21-11.)

8-16. TREATMENT

Casualties are a certainty in war, and the leader must assure health service support is available. The platoon medic is trained to evaluate, triage, and treat casualties. The treatment of serious casualties usually means stabilizing the soldier until he can be evacuated to the battalion aid station. The unit SOP should call for at least one infantryman per squad to be trained as combat lifesavers to assist the medic in treating and evacuating casualties. Since aidmen and combat lifesavers cannot be everywhere on the battlefield, every soldier must be trained to provide basic first aid.

8-17. EVACUATION OF CASUALTIES

Effective casualty evacuation will provide a major increase in the morale of a unit. Casualties are treated where they fall (or under nearby cover and concealment) by a medic, combat lifesaver, or fellow soldier.

a. During the fight, casualties often are left where they received initial treatment (self-aid, buddy-aid). As soon as the situation allows, casualties are moved to the platoon collection point. They can then be evacuated directly to the battalion aid station or to the company collection point, which is designated by the commander during the OPORD. The unit SOP should address this activity and include marking casualties during limited visibility operations. Small, standard, or IR chemical lights work well for this purpose. Once the casualties have been collected, evaluated, and triaged, further evacuation to the battalion casualty collection point or aid station begins. Normally, the battalion aid station is collocated with the battalion casualty collection point.

b. An effective technique, particularly during an attack, is to task–organize a logistics team under the 1SG. These soldiers carry additional ammunition forward to the

platoons and evacuate casualties to either the company or the battalion casualty collection point. The size of the team is determined by the leader during his estimate.

c. When the company is widely dispersed, the casualties may be evacuated directly from the platoon casualty collection point by vehicle or helicopter. Often, helicopter evacuation is restricted due to the enemy ADA threat. In some cases, the casualties must be moved to the company casualty collection point before evacuation. When the battalion's organic ambulances are not enough to move all the wounded, unit leaders may direct supply vehicles to "backhaul" casualties to the battalion aid station after supplies are delivered. In other cases, the platoon sergeant may direct platoon litter teams to carry the casualties to the rear.

d. Leaders must minimize the number of soldiers required to evacuate casualties. Casualties with minor wounds can walk or even assist carrying the more seriously wounded. Field expedient litters can be made by cutting small trees and putting the poles through the sleeves of buttoned BDU blouses. A travoise, or skid, may be used for casualty evacuation. This is a type of litter on which wounded can be strapped, and it can be pulled by one person. It can be locally fabricated from durable, rollable plastic on which tie–down straps are fastened. FM 7-20 discusses a SKEDS litter that is available for issue.

e. In rough terrain (or on patrols), casualties may be evacuated to the battalion aid station by litter teams, carried with the unit until transportation can reach them, or left at a position and picked up later.

f. Unit SOPs and OPORDs must address casualty evacuation in detail. They should cover the duties and responsibilities of key personnel; the evacuation of chemically contaminated casualties (on separate routes from noncontaminated); and the priority for manning key weapons and positions. They should specify preferred and alternate methods of evacuation and make provisions for retrieving and safeguarding the weapons, ammunition, and equipment of casualties. Slightly wounded personnel are treated and returned to duty by the lowest echelon possible. Sick soldiers are evaluated by medics in the platoon and either treated or evacuated as necessary. Remains are kept covered, separated from the wounded, and evacuated by backhaul on supply vehicles as soon as possible. Casualty evacuation should be rehearsed like any other critical part of an operation.